SHEPSHED URBAN SANITARY DISTRICT.

ANNUAL REPORT

FOR THE YEAR

1900.

BY

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Shepshed Urban Sanitary District.

To the Chairman and Members of the Urban District Council.

GENTLEMEN,—

I herewith submit to you the Annual Report on the health of your District for the year 1900, together with a retrospect for the last 10 years, 1890—1899 inclusive. The statistics are calculated on the estimated population of 5000 inhabitants, which estimate we have adopted for the last five years.

VITAL STATISTICS.

Births.

During the year 158 births were registered, of which 77 were males and 81 females, giving a birth-rate of 31·6 per 1000 inhabitants, as compared with 30·2 in 1898. The average number of births in the preceding ten years was 146, being largest in 1896, when 170 births were registered. The average birth-rate for the decade was 31·3.

Deaths.

There were 96 deaths registered during the year, of which 54 were males and 42 females, giving a death-rate of 19·2, as compared with 13·4 in the preceding year. The average number for the ten years was 78, and was largest in 1891, when 89 deaths were registered, mainly due to the severity of the influenza epidemic which prevailed. The average death-rate for the ten years was 16·7. The increased death-rate this year is mainly owing to the mortality from whooping cough, measles, and diarrhœa.

Natural Increase.

The excess of births over the deaths is 62 : last year, 82.

Infant Mortality.

This is calculated on the number of deaths in children under one year per 1000 registered births. This year it is 215, the highest since the Sanitary District was formed : last year, 125. This high infantile mortality was mainly due to whooping cough, diarrhœa, and bronchitis. The average for the last ten years was 135, being highest in 1897, when it was 169. This is accounted for by the small number of births registered in this particular year, being only 112, the smallest since the district was formed.

ZYMOTIC DISEASES.

During the year there have been cases of measles, scarlet fever, whooping cough, diphtheria, membranous croup, enteric fever, diarrhœa, and erysipelas.

Death-rate.

There were 20 deaths from zymotic diseases, giving a zymotic death-rate of 4·0 per 1000 inhabitants, the largest since the Sanitary District was formed. Last year the rate was 1·0.

Infectious Disease (Notification) Acts 1889 and 1899

By the extension of this Act in 1899, the notification of infectious disease has been compulsory everywhere in England and Wales. During the year 59 notifications were received from practitioners, one from myself as Medical Officer of Health, and one from a private person. (The last two notifications mentioned had reference to the same case.) Total, 61. Reference to Table III. shows it was made up of diphtheria 1 case, membranous croup 2, erysipelas 3, scarlet fever 50, and enteric fever 4. The notifications were received as follows:—

Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
20	6	3	5	4	0	2	5	8	4	3	1

A few of the notifications in January were of cases of scarlet fever that began in 1899, but were in an infective state when the Act came into force on 1st January, 1900.

Sheets were printed and distributed to infected houses, containing the penalties in connection with infectious diseases; and in cases of scarlet fever, sheets with instructions as to isolation and disinfection were also distributed.

Disinfectants

In every house were infectious disease was notified, disinfectants in the form of sulphur candles and sanitas were given gratuitously. Carbolic powder was also put into the street gullies in summer, and the schools were disinfected during the holidays.

Isolation and Hospital Accommodation.

Effective isolation in artizan houses is generally futile. We have no Isolation Hospital of our own, nor are there any arrangements for the joint use of one. The provision of an Isolation Hospital was not discussed during the year.

Scarlet Fever

This epidemic, which was the continuation of the epidemic of the previous year, resulted in 50 notifications. It will be seen from the following table that the cases were chiefly at the beginning of the year, falling to *nil* at midsummer when the schools were closed for the holidays; rising again in the Michaelmas quarter, and falling in the Christmas quarter when the National and Roman Catholic Schools were closed on account of measles.

The following are the notifications according to the schools and months:—

School.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug	Sept	Oct.	Nov.	Dec.	Total.
British	10	4	1	2	0	0	1	0	0	0	1	1	20
National ...	2	0	1	2	3	0	0	0	3	1	0	0	12
Roman Catholic	4	0	0	0	0	0	1	1	0	0	1	0	7
Nil.	2	1	1	0	0	0	0	3	2	2	0	0	11
	18	5	3	4	3	0	2	4	5	3	2	1	50

Though the type was severe, the mortality was only one, being the same as in 1899.

Diphtheria and Membranous Croup.

One case of diphtheria was notified in August, and was imported from Leicester. The patient recovered. There were no cases in 1899. Two cases of membranous croup were notified in the same house in April. Both recovered, one being injected with anti-diphtheritic serum. In this case the nightsoil was spread on the garden and not covered in; otherwise the sanitary arrangements

were good, the house being recently built. There seems to be no doubt about the beneficial effects of anti-diphtheritic serum when injected early in cases of diphtheria and membranous croup, but its cost is an objection to the less opulent. I should advise your Council to supply the serum gratuitously, as is done by many other Councils, notably locally, at Quorn.

Erisypelas. Three cases were notified, all in adults, and all recovered. Nothing connected with the sanitation was found to object to.

Enteric Fever Four cases were notified during the year, one of which was imported. They all recovered. The usual precautions were taken, including the examination of the well water at the houses where the cases occurred, and was found good. Two of the cases, though living remote from each other, had drunk water from a well which, in 1898, had been condemned, and was subsequently opened and cleaned out, aud the water ultimately passed. The health of the other people using the water had been uniformly good. In none of the cases were pail closets used at the time of infection. The drainage in each case appeared to be satisfactory. In 1899 no case of typhoid fever came to my knowledge. The District has been singularly free of typhoid, and no death has been registered since 1891, when there was one fatal case.

Measles. A very extensive epidemic of measles was seen at the end of the year. It began in the first week of October, in a case where contact with infection from the Leicester district was traced. No further case came under my notice till the last week of October, when a second, traceable to the first, was found. Further cases cropped up, and the epidemic was very prevalent in November and December. At this time the children attending the National School were chiefly affected, and on 21st November the per centage of absentees was 40. In consequence, I advised the school to be closed till the Christmas Holidays, and this was done. In the first week of December the Infant Roman Catholic School was seriously affected, there being, on the 5th, 37 present out of 80; and this school was closed till the holidays. In the following week it was found necessary to close the Mixed Roman Catholic School (a separate building from the Infant School) for a like period. During this period there were very few cases among children at the British School, and it remained open. Four deaths were registered—not a high mortality for such an extensive epidemic in the winter months. All the schools were disinfected during the holidays. A few cases of measles were seen in 1899, in May and June, but there was no mortality.

Whooping Cough. An epidemic of whooping cough began in May, and continued till August. There were nine deaths, which has been the main factor in the increased general and zymotic death rates. We have had no whooping cough since 1896, and none between that and 1893, when there were about a dozen cases.

Diarrhœa. An unusual number of cases existed from April till August. There were six deaths registered, five of which were in infants. In 1899 but two deaths were registered from this cause.

OTHER DISEASES.

Epidemic Influenza.

This epidemic began in December, 1899, and continued with great virulence through January, subsiding in the beginning of February. No death was registered as being directly due to this cause, but it was undoubtedly the indirect cause of many of the deaths from heart failure and bronchitis, both during the epidemic and afterwards. This was the most severe attack of influenza we have had since the epidemic of 1891, which it similated.

Phthisis.

Seven deaths were registered from this cause, and nine in 1899. Six deaths also were registered this year from other tubercular diseases. Steps were taken in the cases that came to my knowledge to isolate them as far as possible, and to instruct them in the dangers and the means of prevention, by the distribution of leaflets published by the Leicester and Leicestershire branch of the N.A.P.C.

Chicken-pox.

A few cases were seen in April and May, but there was no mortality.

Epidemic Pneumonia.

There were 19 cases came under my notice during the year, the ages ranging from 11 to 64 years, the latter being the only fatal case. This epidemic began in April, and continued till the end of the year, being greatest in May and June, when there were four and seven cases respectively. No such epidemic visited the District in 1899 and 1898, but in 1897 there were forty-five cases, in 1896 eleven, in 1895 no epidemic, and in 1894 twenty-eight cases. There seemed to be nothing in common with regard to these cases, the water supply being from wells, and some of the cases existing in parts where the sewerage does not extend.

Inquests.

There were no deaths from accident, violence, or suicide, and no inquests were held, a unique experience, I think, in a manufacturing district of 5000 inhabitants.

WATER SUPPLY.

This is still supplied from wells, those in the higher parts of the village being deep, and those in the lower parts shallow. During the year main pipes were laid from the new Waterworks at Blackbrook to Shepshed Mill, and will be used to convey water when the works are completed. Eighteen samples of water were examined, and five condemned, but were ultimately passed after the wells had been cleaned and the water re-examined. The supply, as far as quantity went, was good.

SEWERAGE.

In seven streets the sewer was opened and found to be clean, with the exception of Forest Street, were two separate openings showed the pipe to be half full of silt. The man-holes were all opened and cleaned out during the year. A serious obstruction to the 21-inch main was discovered near the sewage farm, there being for a distance of 270 yards, a deposit of silt varying from

9 in. to 19 in. Some roots had grown between the joints of the pipes, thus retarding the flow. Further, a large catch-pit, with diversion channel, had been disused, and this having been put in order, and the pipes cleaned out, the affluent has since entered satisfactorily.

SCAVENGING.

This is done by contract, and the Sanitary Inspector says the work compares favourably with some previous years, but that there is still room for improvement in the summer months. The pail system is largely adopted, and answers well, inasmuch as it keeps the ashpit dry, and lessens the saturation of the ground with filth near the house and well; but when the emptying is neglected it constitutes a nuisance. There is no interchanging of pails. Your Council provide two tumbler carts for the removal of nightsoil, which is carried on at night; but house refuse (other than what is contained in ashpits) is removed during the day.

NUISANCES.

Various nuisances have been reported on during the year, and abated. Systematic inspections have been made in conjunction with the Sanitary Inspector, and the results submitted to your Council.

A case of over-crowding in a workshop was rectified. Under the Public Health Act, 1875, six houses were condemned. Regular inspections of food were made, but no seizure took place.

BYE-LAWS.

A draft of the Bye-laws was submitted to the Local Government Board, who returned them with suggestions which your Council approved of. The approved draft has been returned to the Local Government Board, in whose possession it now is. The proposed bye-laws make no provision for slaughter-houses, but I have repeatedly advocated the discontinuance of private, and the adoption of a public slaughter-house, as the proper inspection of meat and offal, for tubercular and other diseases, cannot otherwise be carried out.

ADOPTIVE ACTS.

The Burials Act, the Public Libraries Act, and Part III. of the Public Health Acts Amendment Act, 1890 (after notice and resolution), are the only Acts adopted. The additional three acres to the Cemetery will soon be required. The original Cemetery, which adjoins, has been in use since 1876, and to the end of November, 1900, there had been 1605 interments.

We have no Public Library.

Part III. of the Public Health Acts Amendment Act, 1890, was adopted to enable some bye-laws to be included.

Dairies, Cow-sheds, and Milk-shops.

We have no regulations with regard to these, but inspections have been made. Copies of the Infectious Disease (Prevention) Act, 1890, were supplied to the Council, but no action taken thereon.

Bakehouses.

Six were inspected twice during the year.

Common Lodging Houses.

We have had none since 1895, when the only one then existing was suppressed for not complying with the requirements.

THE TABLES.

Table I. shows the average births and deaths, &c., for the last ten years; that the population, at the census of 1891, was 4416, when there were 953 inhabited houses, giving an average of 4·6 persons per house. The area in acres of the District is 5280.

Table II. is not required to be filled up, as the District consists of one locality only.

Table III. shows the notifications received during the year, according to disease and age.

Table IV. shows the causes of, and ages at death, during the year.

RESUMÉ.

The most striking features of the year are the increased general and zymotic death-rates, and the greatly increased infant mortality. All this is explained by the extraordinary visitation of zymotic diseases, several of which, such as measles and whooping cough, we have not had in epidemic form for some years. Among infants the mortality was great, for many had hardly recovered from the long and severe attack of whooping cough, when they were stricken with measles, and to aggravate matters, the latter occurred during the winter months. From this explanation it can be seen that the increased mortality was mainly in infants, being 34 under one year of age, out of a total of 96 at all ages. Such a combination of unfortunate circumstances is not, I trust, likely to happen again soon.

The progress of the Waterworks is to be hailed with satisfaction, as many of the wells are in a position that renders them liable to pollution.

On the whole I consider the sanitary state of the District fair.

I have the honour, Gentlemen,

To remain your obedient Servant,

G. Cardno Still.

Shepshed,

February, 1901.

TABLE I.

For Whole District.

Year.	Population estimated to middle of each year.	Births.		Deaths under One Year of Age.		Deaths at all Ages. Total.	
		Number.	Rate.	Number.	Rate per 1000 Births registered	Number.	Rate.
1890	4725	129	27·3	15	116	82	17·3
1891	4416	148	33·5	21	141	89	20·1
1892	4416	137	31·0	20	145	74	16·8
1893	4416	160	36·2	22	137	88	19·9
1894	4416	134	30·3	20	149	80	18·1
1895	4416	159	36·3	24	150	86	19·5
1896	5000	170	34·0	22	129	68	13·6
1897	5000	112	22·4	19	169	80	16·0
1898	5000	162	32·4	16	98	66	13·2
1899	5000	151	30·2	19	125	67	13·4
Averages for years 1890–1899	4680·5	146·2	31·3	19·8	135	78·0	16·7
1900	5000	158	31·6	34	215	96	19·2

Area of District in acres (exclusive of area covered by water), 5280.
Total population at all ages, at census of 1891, 4416.
Number of inhabited houses " " 953.
Average number of persons per house " 4·6.

TABLE II. Not required for this District.

TABLE III.

Cases of Infectious Disease notified during the Year 1900.

Notifiable Disease.	Cases notified in Whole District.						
	At all Ages.	At Ages—Years.					
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.
Small-pox	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...
Diphtheria	1	...	1	...	...	...	...
Membranous Croup ...	2	...	2	...	...	...	...
Erysipelas	3	...	...	...	...	3	...
Scarlet Fever	50	...	20	24	2	4	...
Typhus Fever	...	...	...	...	...	...	...
Enteric Fever	4	...	...	1	2	1	...
Relapsing Fever ...	...	...	...	...	...	...	...
Continued Fever ...	...	...	...	...	...	...	...
Puerperal Fever ...	...	...	..	...	...	...	...
Plague	...	...	...	...	...	...	...
Totals	60	...	23	25	4	8	...

TABLE IV.

Causes of, and Ages at, Death during Year 1900.

Causes of Death.	Deaths in whole District at subjoined Ages.						
	All ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.
Small-pox	...	...	...	...	...	...	...
Measles	4	3	1	...	...	...	...
Scarlet Fever	1	...	...	1	...	...	...
Whooping-cough	9	6	3	...	...	...	...
Diphtheria and Membranous Croup ..	...	...	...	...	...	...	...
Croup	...	...	...	...	...	...	...
Typhus Fever	...	...	...	...	...	...	...
Enteric Fever	...	...	...	...	...	...	...
Epidemic Influenza	...	...	..	...	...	...	...
Cholera	...	...	...	...	...	...	...
Plague	...	...	...	...	...	...	...
Diarrhœa	6	5	1	...	..	...	...
Enteritis	1	...	...	...	...	1	...
Puerperal Fever	...	...	...	...	...	...	...
Erysipelas	...	...	...	...	...	...	...
Other Septic Diseases	...	...	...	...	...	...	...
Phthisis	7	...	...	...	1	6	...
Other Tubercular Diseases	6	1	2	3	...	...	...
Cancer, malignant disease	5	...	...	...	...	2	3
Bronchitis	12	8	1	...	...	1	2
Pneumonia	1	...	...	...	...	1	...
Pleurisy	...	...	...	...	...	...	...
Other Diseases of Respiratory Organs ...	2	1	...	...	...	1	...
Alcoholism Cirrhosis of Liver ...	1	...	...	...	...	1	...
Venereal Diseases	...	...	...	...	...	...	...
Premature Birth	4	4	...	...	...	...	...
Diseases and Accidents of parturition ...	1	...	...	...	...	1	...
Heart Diseases	6	...	...	1	...	3	2
Accidents	...	...	...	...	...	...	...
Suicides	...	...	...	...	...	...	...
All other causes...	30	6	...	1	1	3	19
All causes	96	34	8	6	2	20	26

TABLE IV.

Causes of, and Ages at, Death during Year 1900.

Causes of Death.	Number of Deaths at specified Ages.						
	All ages.	Under 1 year.	1 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and upwards.
Small-pox	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...
Scarlet Fever	...	...	...	1	...	...	...
Whooping-cough	...	...	...	...	...	...	...
Diphtheria and Membranous Croup	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...
Typhus Fever	...	...	...	...	...	...	...
Enteric Fever	...	...	...	...	...	...	...
Relapsing Fever	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...
Plague	...	...	...	...	...	...	...
Diarrhœa	...	...	...	...	...	...	...
Dysentery	...	...	...	...	...	...	...
Puerperal Fever	...	...	...	...	...	...	...
Erysipelas	...	...	...	...	...	...	...
Other Septic Diseases	...	...	...	...	...	...	...
Phthisis	...	...	...	...	...	...	...
Other Tubercular Diseases	...	...	...	...	...	...	...
Cancer, malignant disease	...	...	...	...	...	...	...
Bronchitis	...	...	...	...	...	...	...
Pneumonia	...	...	...	...	...	...	...
Pleurisy	...	...	...	...	...	...	...
Other Diseases of Respiratory Organs	...	...	...	...	...	...	...
Alcoholism, Cirrhosis of Liver	...	...	...	...	...	...	...
Venereal Diseases	...	...	...	...	...	...	...
Premature Birth	...	...	...	...	...	...	...
Diseases and Accidents of parturition	...	...	...	...	...	...	...
Heart Diseases	...	...	...	...	...	...	...
Accidents	...	...	...	...	...	...	...
Suicides	...	...	...	...	...	...	...
All other causes	...	...	...	...	...	...	...
All causes	...	...	...	...	...	...	...